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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,964	08/28/2003	Razak Hossain	03-LJ-011	1963

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EXAMINER

LEVIN, NAUM B

ART UNIT PAPER NUMBER

2825

DATE MAILED: 08/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

E/

Office Action Summary	Application No. 10/604,964	Applicant(s) HOSSAIN, RAZAK	
	Examiner Naum B. Levin	Art Unit 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-19 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application 10/604,964 filed on 08/28/2003.

Claims 1- 19 remain pending in the application.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-3 (Group 1), drawn to a circuit comprising scan chain elements to contain a vector for selective application to circuit elements, classified in class 716, subclass 5.

II. Claims 4-6 (Group 2), drawn to a circuit comprising scan chain elements to contain a vector for selective application to circuit elements and further comprising a circuit for receiving a test vector for clocking into said scan chain elements, classified in class 716, subclass 5.

III. Claims 7-9 (Group 3), drawn to a method for reducing leakage currents in a circuit comprising clocking a configuration vector into scan chain elements, classified in class 716, subclass 5.

IV. Claims 10-12 (Group 4), drawn to a method for reducing leakage currents in a circuit comprising selectively clocking either a test data vector or a configuration vector into scan chain elements, classified in class 716, subclass 5.

V. Claims 13-15 (Group 5), drawn to a method for reducing leakage currents in a circuit comprising determining a vector having first states which if applied to circuit elements of circuit results in lower leakage currents than second states, classified in class 716, subclass 5.

VI. Claims 16-19 (Group 6), drawn to a method for reducing leakage currents in a circuit comprising clocking test data into scan chain elements of said circuit when a second operating mode is detected, classified in class 716, subclass 5.

Inventions 1-3 (Group 1) and 4-6 (Group 2) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed, because Group 2 includes "a circuit for receiving a test vector for clocking into said scan chain elements". The subcombination has separate utility such as "a circuit for receiving a test vector for clocking into said scan chain elements".

Inventions 7-9 (Group 3) and 4-6 (Group 2) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed, because Group 2 includes "a circuit for receiving a test vector for clocking into said scan chain elements". The subcombination has separate utility such as "a circuit for receiving a test vector for clocking into said scan chain elements".

Inventions 7-9 (Group 3) and 10-12 (Group 4) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed, because Group 4 includes “selectively clocking either a test data vector or a configuration vector into scan chain elements”. The subcombination has separate utility such as “selectively clocking either a test data vector or a configuration vector into scan chain elements”.

Inventions 10-12 (Group 4) and 13-15 (Group 5) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed, because Group 5 includes “determining a vector having first states which if applied to circuit elements of circuit results in lower leakage currents than second states”. The subcombination has separate utility such as “determining a vector having first states which if applied to circuit elements of circuit results in lower leakage currents than second states”.

Inventions 13-15 (Group 5) and 16-19 (Group 6) are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as

claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed, because Group 5 includes "clocking test data into scan chain elements of said circuit when a second operating mode is detected". The subcombination has separate utility such as "clocking test data into scan chain elements of said circuit when a second operating mode is detected".

3. Because these inventions are distinct for the reasons given above, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naum B. Levin whose telephone number is 571-272-1898. The examiner can normally be reached on M-F (8:00-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Thuan Do
THUAN DO
Primary examiner
08/28/06